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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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RATNERPRESTIA P O BOX 980 VALLEY FORGE, PA 19482-0980			WOZNIAK, JAMES S	
			ART UNIT	PAPER NUMBER
			2655	
DATE MAILED: 12/06/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/997,391

Applicant(s)

NAIMPALLY ET AL.

Examiner

James S. Wozniak

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 September 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 and 8-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 November 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendment*

1. In response to the office action from 6/24/2005, the applicant has submitted an amendment, filed 9/23/2005, amending claim 15, while arguing to traverse the art rejection based on the limitation regarding converting a text file into speech and then storing the speech file (*Amendment, pages 8-9*). The applicant's arguments have been fully considered but are moot with respect to the new grounds of rejection in view of Van Kommer (*U.S. Patent: 6,678,659*).

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the

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reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. **Claims 1, 2, and 6** are rejected under 35 U.S.C. 102(e) as being anticipated by Van Kommer (*U.S. Patent: 6,678,659*).

With respect to **Claim 1**, Van Kommer discloses:

- (a) Storing text files in a database at the remote location (Col. 3, Lines 54-64);
- (b) Converting, at the remote location, the text files stored in step (a) into speech files and storing the converted speech files (*Col. 4, Line 42- Col. 5, Line 10; and Col. 6, Lines 31-44*);
- (c) Receiving a request for a portion of the speech files converted in step (b) (*Col. 5, Lines 19-46*);
- (d) Retrieving the requested portion from the stored converted speech files and transmitting to the information appliance the portion of the speech files requested in step (c) (*Col. 5, Lines 31-46*);
- (e) Receiving and presenting the speech files transmitted in step (d) through audio speakers (*Col. 5, Lines 31-46*).

With respect to **Claim 2**, Van Kommer recites:

Receiving and presenting speech files of one of: electronic programming guide information, weather information and news information (*weather forecasts, Col. 5, Lines 11-46*).

With respect to **Claim 6**, Van Kommer discloses:

Receiving a selection of one of multiple voice personalities and converting the text files into speech files using the selected voice personality (*Col. 7, Lines 16-27*).

4. **Claims 3-4, 11, 13, and 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Kommer (*U.S. Patent: 6,678,659*) in view of Hong et al (*U.S. Patent: 5,737,030*).

With respect to **Claim 3**, Van Kommer teaches the text-to-speech conversion, storing, and distributing method, as applied to claim 1. Although Van Kommer teaches method use in a cable TV (CATV) network (*Col. 4, Lines 27-41*), Van Kommer does not specifically suggest text-to-speech conversion processing performed with EPG text files, however Hong teaches text-to-speech conversion using EPG text files (*providing an audio representation of program guide information, Col. 7, Lines 1-16*). Hong also recites:

(f) Receiving an indication of a location on the page of text (*position information and cursor, Col. 4, Line 55- Col. 5, Line 14, Col. 6, Line 40- Col. 7, Line 16, and Fig. 5*); and

(g) Transmitting a portion of the EPG speech files corresponding to the received location indication (audio information corresponding to a program highlighted by a cursor, *Col. 4, Line 55- Col. 5, Line 14, Col. 6, Line 40- Col. 7, Line 16, and Fig. 5*).

Hong additionally shows the ability to display EPG text as per Fig. 5.

Van Kommer and Hong are analogous art because they are from a similar field of endeavor in text-to-speech conversion. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Van Kommer with the steps of receiving EPG-related processing taught by Hong in order to provide an illiterate or vision impaired individual with program specific audio information (*Hong, Col. 2, Lines 40-43*).

With respect to **Claim 4**, Hong additionally discloses:

(f) Includes receiving an indication of a location in the grid; and step (g) includes first transmitting speech files of the at least one date, multiple channels and multiple times and then

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separately transmitting speech files of the legend in the grid location indicated in step (f) (*cursor, date, channel, and time, Fig. 5, and Col. 4, Line 55- Col. 5, Line 14, Col. 6, Line 40- Col. 7, Line 16*).

Van Kommer and Hong are analogous art because they are from a similar field of endeavor in text-to-speech conversion. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Van Kommer with the means for receiving an indication of a grid location and separately transmitting speech files corresponding to each grid location as taught by Hong in order to allow an illiterate or visually impaired user with grid information through a comprehensible audio means (*Hong, Col. 2, Lines 40-43*).

With respect to **Claim 11**, Van Kommer discloses:

- (a) Storing text files in a database at the remote location (Col. 3, Lines 54-64);
- (b) Converting, at the remote location, the text files stored in step (a) into speech files and storing the converted speech files (*Col. 4, Line 42- Col. 5, Line 10; and Col. 6, Lines 31-44*);
- (c) Receiving a request for a portion of the speech files converted in step (b) (*Col. 5, Lines 19-46*);
- (d) Retrieving the requested portion from the stored converted speech files and transmitting to the information appliance the portion of the speech files requested in step (c) (*Col. 5, Lines 31-46*);
- (e) Receiving and presenting the speech files transmitted in step (d) through audio speakers (*Col. 5, Lines 31-46*).

Van Kommer teaches a method featuring similar functionality to the presently claimed invention, Van Kommer does not specifically suggest method use in an EPG application, however Hong teaches providing an audio representation of program guide information (*Col. 7, Lines 1-16*). Hong also teaches the use of a set top box for receiving such EPG information (*Col. 7, Lines 17-21*).

Van Kommer and Hong are analogous art because they are from a similar field of endeavor in text-to-speech conversion. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Van Kommer with the method of providing an audio representation of EPG data as taught by Hong to provide illiterate or vision impaired individuals with a means of accessing television program information (*Hong, Col. 2, Lines 40-43*).

With respect to **Claim 13**, Hong teaches the EPG speech data corresponding to a grid position as applied to Claim 4, and Van Kommer and Hong are obvious in combination for the reasons given with respect to Claim 4. Also, it would be inherent that a speech file would be paused upon completing program information output and that additional program information supplied in response to a change in cursor position, since the audio EPG information is output upon changing a cursor position (*Hong, Col. 4, Line 55- Col. 5, Line 14, Col. 6, Line 40- Col. 7, Line 16*), thus providing the user with instant program information (*Hong, Col. 7, Lines 29-35*).

With respect to **Claim 14**, Hong further discloses:

Selecting the channel for one of listening and viewing (*Col. 4, Line 43*).

5. **Claim 5** is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Kommer (*U.S. Patent: 6,678,659*) in view of Oh (*U.S. Patent: 6,141,642*).

With respect to **Claim 5**, Van Kommer teaches the text-to-speech conversion, storing, and distributing method, as applied to claim 1. Although Van Kommer further discloses performing the text-to-speech conversion for multiple languages (Col. 7, Lines 28-48), the use of separate synthesizers is not specifically suggested, however Oh shows:

Converting the text files into speech files using a first text-to-speech (TTS) synthesizer and a second TTS synthesizer, whereby the first TTS synthesizer and the second TTS synthesizer use different languages (*Fig. 2, Elements 212 and 214*).

Van Kommer and Oh are analogous art because they are from a similar field of endeavor in speech synthesis. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Van Kommer with the use of multiple TTS synthesizers corresponding to different language as taught by Oh in order to provide text-to-speech synthesis for text that appears in multiple languages (*Oh, Col. 1, Lines 49-52*).

6. **Claim 8** is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Kommer (*U.S. Patent: 6,678,659*) in view of Houser et al (*U.S. Patent: 5,774,859*).

With respect to **Claim 8**, Van Kommer teaches the text-to-speech conversion, storing, and distributing method, as applied to claim 1. Van Kommer does specifically suggest the use of an audio output buffer, however, the use of such a buffer is well-known in the audio processing art as is evidenced by Houser:



Step (e) includes buffering received speech files in a buffer of the information appliance, and presenting the buffered speech files through the audio speakers (*Col. 13, Lines 11-31*).

Van Kommer and Houser are analogous art because they are from a similar field of endeavor in speech processing systems. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Van Kommer with the use of an audio output buffer in order to provide temporary storage for necessary signal processing before an audio signal is sent to a speaker (*Col. 13, Lines 11-31*).

7. **Claim 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Kommer (*U.S. Patent: 6,678,659*) in view of Cannon et al (*U.S. Patent: 6,510,209*).

With respect to **Claim 9**, Van Kommer teaches the text-to-speech conversion, storing, and distributing method, as applied to claim 1. Van Kommer does not teach presenting set-up configuration prompts to a user and implementing a predetermined input time period after issuing such a prompt, however Cannon discloses:

(f) Presenting set-up configurations sequentially through the audio speaker (*Fig. 4, Element 412*);

(g) Pausing the audio presented in step (f) between each set-up configuration (*waiting a predetermined time period for an input command, Col. 6, Lines 4-15*); and

(h) Waiting a predetermined time period during each pause to receive an input command (*waiting a predetermined time period for an input command, Col. 6, Lines 4-15*).

Van Kommer and Cannon are analogous art because they are from a similar field of endeavor in speech processing networks. Thus, it would have been obvious to a person of

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ordinary skill in the art, at the time of invention, to modify the teachings of Van Kommer with the use of set-up configuration prompts and a predetermined time period for inputting a configuration command in order to allow a user to conveniently configure a device without from a remote location (*Cannon, Col. 1, Line 66- Col. 2, Line 2*) while only accepting commands for a predetermined time period to prevent an unintended input from being improperly recognized as a command.

8. **Claim 10** is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Kommer (*U.S. Patent: 6,678,659*) in view of Stephens (*U.S. Patent: 6,557,026*).

Van Kommer teaches the text-to-speech conversion, storing, and distributing method, as applied to claim 1. Van Kommer does not specifically suggest periodically receiving and storing speech files, however Stephens recites a system and method that allows a user to periodically receive and store news in audio format (*Col. 9, Line 49- Col. 10, Line 17*).

Van Kommer and Stephens are analogous art because they are from a similar field of endeavor in text-to-speech conversion. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Van Kommer with the means for periodically receiving recent news stories in an audio format as taught by Stephens in order to provide a means for automatically checking for and acquiring new news stories (*Stephens, Col. 9, Line 49- Col. 10, Line 4*).

9. **Claim 12** is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Kommer (*U.S. Patent: 6,678,659*) in view of Hong et al (*U.S. Patent: 5,737,030*), and further in view of Houser et al (*U.S. Patent: 5,774,859*).

With respect to **Claim 12**, Van Kommer in view of Hong teaches the ability to perform text-to-speech conversion with EPG data, as applied to claim 11. Van Kommer in view of Hong does not specifically suggest updating EPG data at periodic time intervals, however Houser teaches such an EPG data update (*periodically updating and storing EPG information, Col. 23, Lines 7-37; and Col. 29, Lines 23-49*).

Van Kommer, Hong, and Houser are analogous art because they are from a similar field of endeavor in speech processing systems. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Van Kommer in view of Hong with the means for periodically EPG data at a local device as taught by Houser in order to ensure that device EPG data is up-to-date and accurate (*Houser, Col. 23, Lines 30-34*).

10. **Claim 15** is rejected under 35 U.S.C. 103(a) as being unpatentable over Lumelsky (*U.S. Patent: 6,081,780*) in view of Houser et al, and further in view of Stephens (*U.S. Patent: 6,557,026*).

With respect to **Claim 15**, Lumelsky discloses:

A memory device (*Fig. 4, Element 313*);

A modem adapted to connect to a network (*Fig. 4, Element 320*);

A processor coupled to the modem for communicating on the network, receiving speech files from the network, and storing the speech files in the memory device (*Col. 19, Lines 30-52*).

A receiver for accepting input commands from a remote control (*hands-free voice controls, Col. 21, Lines 5-62*).

An audio speaker (*Fig. 4, Element 325*);

The processor responsive to the input commands accepted by the receiver for extracting a portion of the speech files stored in the memory and sending the extracted portion of the speech files to the audio speaker (*Col. 20, Line 13- Col. 21, Line 15*).

Although voice controls can be considered as a form of remote controls, Lumelsky does not specifically suggest a physical remote control device, however Houser discloses a physical remote control device for initiating speech recognition control commands and having keys as an alternate command entry means (*Col. 19, Lines 5-26*).

Lumelsky and Houser are analogous art because they are from a similar field of endeavor in speech processing systems. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Lumelsky with the physical remote control device as taught by Houser to enhance a speech recognition interface by providing a user with a command initiation indication after pressing a controller button so that a user is aware that a command entry system is active (*Houser, Col. 19, Lines 5-26*).

Lumelsky in view of Houser do not specifically suggest that speech files periodically received, however Stephens recites a system and method that allows a user to periodically receive and store news in audio format (*Col. 9, Line 49- Col. 10, Line 17*).

Lumelsky, Houser, and Stephens are analogous art because they are from a similar field of endeavor in speech processing systems. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Lumelsky in view of

Houser with the means for periodically receiving recent news stories in an audio format as taught by Stephens in order to provide a means for automatically checking for and acquiring new news stories (*Stephens, Col. 9, Line 49- Col. 10, Line 4*).

11. **Claims 16-19 and 21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Lumelsky in view of Houser et al, in view of Stephens, and yet further in view of Hong et al.

With respect to **Claim 16**, Lumelsky further discloses:

A server coupled to the network (*authoring system server, Fig. 1, Element 101*);

Text file storage, TTS synthesizer, and a transmitter for transmitting files onto the network (*text files on a computer and TTS, Col. 12, Lines 44-58; and data transmission to a network, Col. 7, Lines 3-25*);

Lumelsky in view of Houser and further in view of Stephens does not specifically suggest method use in an EPG application, however Hong teaches such a TTS application (*providing an audio representation of program guide information, Col. 7, Lines 1-16*).

Lumelsky, Houser, Stephens, and Hong are analogous art because they are from a similar field of endeavor in audio signal processing. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Lumelsky in view of Houser and further in view of Stephens with the method of providing an audio representation of EPG data as taught by Hong to provide illiterate or vision impaired individuals with a means of accessing television program information (*Hong, Col. 2, Lines 40-43*).

With respect to **Claim 17**, Houser further recites:

The processor receives the EPG speech files and the EPG text files from the network *(periodically updating and storing EPG information, Col. 23, Lines 7-37, which includes phonemic data, Col. 29, Lines 23-49)*;

The processor formats the EPG text files into a page of text; and the processor provides the page for display on the television monitor *(Fig. 11)*;

The receiver receiving an input command which provides an identifier for identifying a location on the page displayed on the television monitor *(cursor position, Col. 25, Lines 52-64)*; and

Houser does not specifically suggest providing audio program data based upon cursor position, however Hong teaches this limitation with respect to Claim 3.

Lumelsky, Houser, Stephens, and Hong are analogous art because they are from a similar field of endeavor in EPG data processing. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Lumelsky, Houser, and Stephens with the steps of receiving a page location indication and receiving speech data based upon the location as taught by Hong in order to provide an illiterate or vision impaired individual with program specific audio information *(Hong, Col. 2, Lines 40-43)*.

With respect to **Claim 18**, Hong additionally discloses the output of EPG speech data corresponding to grid position as applied to Claim 4.

With respect to **Claim 19**, Hong teaches the EPG grid information acquisition means as applied to Claim 4, which downloads grid information, and more detailed program specific information separately, based upon cursor position.

With respect to **Claim 21**, Lumelsky further discloses selecting a preferred speaker's voice (*Col. 10, Line 49- Col. 11, Line 10*).

12. **Claim 20** is rejected under 35 U.S.C. 103(a) as being unpatentable over Lumelsky in view of Houser et al, further in view of Stephens, further in view of Hong, and yet further in view of Oh.

Lumelsky in view of Houser et al, in view of Stephens, and further in view of Hong teaches the EPG speech synthesis system as applied to Claim 16, however none of the aforementioned references specifically teaches the use of separate synthesizers, however Oh shows:

Converting the text files into speech files using a first text-to-speech (TTS) synthesizer and a second TTS synthesizer, whereby the first TTS synthesizer and the second TTS synthesizer use different languages (*Fig. 2, Elements 212 and 214*).

Lumelsky, Houser, Stephens, Hong, and Oh, are analogous art because they are from a similar field of endeavor in audio processing. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Lumelsky in view of Houser et al, and further in view of Hong with the use of multiple TTS synthesizers corresponding to different language as taught by Oh in order to provide text-to-speech synthesis for text that appears in multiple languages (*Oh, Col. 1, Lines 49-52*).

*Conclusion*

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Kochanski et al (*U.S. Patent: 6,625,576*)- teaches a method for transmitting a portion of text-to-speech conversion result to a client for storage in a cache memory.

Barile et al (*U.S. Patent: 6,856,990*)- teaches a system for media content conversion having text-to-speech software.

Walker et al (*U.S. Patent Pub: 2001/01048736*)- teaches a content server that converts text-to-speech for cache storage and future user access.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Wozniak whose telephone number is (571) 272-7632. The examiner can normally be reached on M-Th, 7:30-5:00, F, 7:30-4, Off Alternate Fridays.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on (571) 272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James S. Wozniak  
10/25/2005

  
W. H. YOUNG  
PRIMARY EXAMINER